

TWO NEW TROMBIDIID LARVAE FROM NEW GUINEA
(ACARINA: TROMBIDIIDAE).

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(Five Text-figures.)

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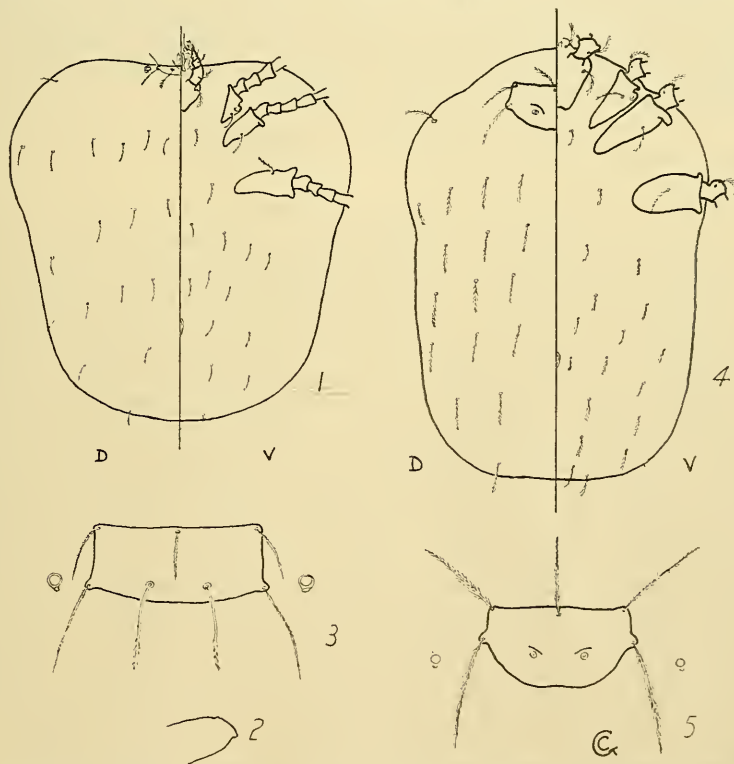
The following new larvae of the subfamily Trombiculinae have been taken in New Guinea:

Genus *TROMBICULA* Berlese 1905.

Redia, ii, fasc. 2, 155.

TROMBICULA ROBUSTA, n. sp. Figs. 1, 2, 3.

Body hump-backed, with broad rounded shoulders, and rounded posteriorly; widest opposite coxae iii. The cephalothorax set well back on the ventral surface, with only the chelicerae and part of the palpi showing from the dorsal aspect. Striations strong and coarse. Pitting on maxilla, scutum, and coxae. Colour blood red. Only well-engorged specimens taken; L,* 688 μ ; W, 655 μ ; largest seen, 820 μ \times 833 μ . Maxillary



Figs. 1-3.—*Trombicula robusta*, n. sp. 1, Composite dorsal and ventral diagram. (This figure is drawn to one-half the scale of Fig. 4.) 2, Cheliceral teeth. 3, Scutum.

Figs. 4, 5.—*Neoschöngastia shieldsi*, n. sp. 4, Composite dorsal and ventral diagram. 5, Scutum.

* As in previous papers, L = length, W = width, AL = anterolateral, AM = Anteromedian, and PL = posterolateral.

setae short, fine, curved, with a few fine branches. Chelicerae straight, stout, abruptly pointed; dorsoapical tooth minute, subterminal; ventral tooth minute, terminal. A short nude seta on each cheliceral sheath. Palpi stout, rounded, with a long branched seta on ii; a coarse many-branched seta on iii; on iv, two nude setae near the base, and one with very short branches half-way. Appendiculum very small, rounded, with eight setae: one long nude seta, one short stout spur, one very long, straight, coarse seta with long branches, and five other branched setae. Palpal claws trifurcate, the middle element long, stout, and bluntly pointed; the dorsal element similar but smaller; the ventral element vestigial. Scutum set on the forward face of the body, only visible in profile in most specimens (hence its description and length are not accurate); L, 37.5μ ; W, 87.5μ . Anterior margin sinuate, concave; anterior corners rounded; lateral margins convex; posterior margin sinuate, convex in its middle four-sixths; posterior corners angular, projecting laterally. Scutal setae 5: stout, tapered, with very short spine-like branches. The AL in the anterior corners, just in front of the AM; the PL in the posterior corners. AM, 25μ ; AL, 28μ ; PL, 47μ . Pseudostigmata level with the PL setae; 27μ apart. Pseudostigmatic organs filiform, with a few fine branches on the distal two-fifths; L, 41μ . Ocular shield present. Eyes double, the anterior much the larger and set with its posterior margin opposite the pseudostigmata. Body setae 64: short, curved, with very short spine-like branches. Dorsum: setae 36, arranged in rows as follows: 2, 12, 8, 8, 4, 2. Venter: setae 28, arranged in rows as follows: 2, 2, 8, 6, 4, 4, 2; the anus is just behind row 5. Legs short; i, 292μ ; ii, 278μ ; iii, 333μ . Leg setae long, straight, with fine branches on all sides. Coxal setae single, short, fine, curved, with fine branches along the convex side. Sixth segments not unduly expanded or constricted. All tarsi tapering; that of leg iii very long and slender. A short spur on tarsi i and ii; on iii, a long straight seta with very short spine-like branches.

Principal hosts: *Pitta* (*Pitta mackloti* Temminck, 1834), colonies on legs; Baiune. Bird (*Microeca* sp.), colonies on legs; Bulolo, T.N.G.

Genus NEOSCHÖNGASTIA Ewing '1929.

A Manual of External Parasites, 187.

NEOSCHÖNGASTIA SHIELDSI, n. sp. Figs. 4, 5.

Body ovoid, with a suggestion of indentations at the level of coxae ii, and behind coxae iii; widest opposite coxae iii. Striations fine and indefinite. Pitting on maxilla, scutum, and coxae. Colour cream. Only well-engorged specimens taken; L, 416μ ; W, 291μ ; largest seen, $444\mu \times 333\mu$. Maxillary setae long, curved, with long branches. Chelicerae straight and stout; dorsoapical tooth small and blunt; ventral tooth apparently missing. A coarse, slightly curved seta with branches on the convex side on each cheliceral sheath. Palpi angular, wide at segment ii, with a sharp tubercle on the angle. On ii, one long coarse seta with many long branches; three branched setae on iii, two at the base and one towards the apex; on iv, one nude and one branched seta near the base. Appendiculum very small and bluntly pointed, bearing one short spur, one curved nude seta, and at least three branched setae. Palpal claw bifurcate, the dorsal element slender, slightly curved and bluntly pointed; the ventral element similar, but slightly shorter. Scutum straight before, convex behind, twice as wide as long. Anterior margin sinuate; anterior corners rounded, slightly projecting; lateral margins short, sinuate; posterior margin strongly salient, rounded, smoothly indented in its middle sixth; posterior corners angular and projecting; L, 39μ ; W, 75μ . A small oblique ridge in front of each pseudostigma. Scutal setae 5: almost straight, moderately stout, with long branches on all sides; the AL in the anterior corners, 45μ long; the AM 37.5μ long, set back from the anterior margin; the PL in the posterior corners, 56μ long. Pseudostigmata two-thirds of the way back, behind the PL setae, 24μ apart. Pseudostigmatic organs missing in all specimens. Ocular shield not visible. Eyes double, the posterior small and almost invisible, the anterior about 25μ from the scutum with its front edge level with the pseudostigmata. Body setae 70: those of the dorsum coarse, almost straight, with long branches on all sides; those of the anterior portion of the venter very short, straight, with relatively long branches on all sides; those of the posterior portion of the venter intermediate in size. Dorsum: setae 34, arranged in

rows as follows: 2, 8, 6, 6, 6, 4, 2. Venter: setae 36, arranged in rows as follows: 2, 2, 4, 4, 6, 6, 4, 4, 4. The anus is at the level of row 6. Legs: i, 170μ ; ii, 125μ ; iii, 210μ . Leg setae short, straight, and slender, with fine branches. Coxal setae single, with branches on the convex side only. A long stout curved seta on each second segment, with many long branches. Sixth segments not unduly constricted or expanded. Tarsi i and ii short and stumpy; iii long and slender. A short spur on tarsi i and ii; no spur or long nude seta on iii.

Casual host: The rufous scale-tailed rat (*Melomys rubex* Thomas, 1922), eight specimens inside ear; Bulolo, T.N.G.

Although the pseudostigmatic organs are missing from all specimens, the general features of the species and the scutal appearance convince the writer that there is little doubt that it belongs to the genus *Neoschöngastia*, in which it is provisionally placed.

The type specimens of the above species, described as new, will be deposited in the collection of the School of Public Health and Tropical Medicine, University of Sydney. Paratypes at the Australian Museum, Sydney.

